

## Claims

- [c1] 1. A method for operating with a commercial system having a display for a user, the method comprising performing the following procedures during a session with the user:
- using a decision rule set to select either one of a plurality of first signals or one of a plurality of second signals, for sending to the display, the one of the plurality of second signals being to solicit information about the user;
- measuring a response of the user to the previously selected signal; and
- updating the decision rule set in accordance with a probability.
- [c2] 2. The method of claim 1, wherein using includes conditioning selection upon whether certain information is known about the user.
- [c3] 3. The method of claim 1, wherein using includes conditioning selection upon whether a model has converged.
- [c4] 4. The method of claim 1, wherein the one of the plurality of second signals is determined by an Adaptive Homing Process.
- [c5] 5. The method of claim 1, wherein updating includes updating depending upon a Markov Decision Process.
- [c6] 6. The method of claim 1, wherein updating includes updating depending on whether the user selected a product for purchase.
- [c7] 7. A system for operating with a commercial system having a display for a user, the system comprising:
- a decision rule set;
- a selector that reads the decision rule set to select either one of a plurality of first signals or one of a plurality of second signals, for sending to the display, the one of the plurality of second signals being to solicit information about the user;
- logic that measures a response of the user to the previously selected signal;
- and
- an updater that updates the decision rule set in accordance with a

probability.

- [c8] 8. The system of claim 7, further comprising a memory that stores demographic information about the user, wherein the selector conditions selection responsive to a content of the memory.
- [c9] 9. The system of claim 7, further comprising a model, wherein the selector conditions selection depending upon whether the model has converged.
- [c10] 10. The system of claim 7, wherein the selector includes a plurality of instructions executable by a processor to perform by an Adaptive Homing Process.
- [c11] 11. The system of claim 7, wherein the updater is responsive to a plurality of instructions executable by a processor to perform a Markov Decision Process.
- [c12] 12. The system of claim 7, wherein the updater is responsive to whether the user selected a product for purchase.
- [c13] 13. A system for operating with a commercial system having a display for a user, the system comprising:  
means for using a decision rule set to select either one of a plurality of first signals or one of a plurality of second signals, for sending to the display, the one of the plurality of second signals being to solicit information about the user;  
means for measuring a response of the user to the previously selected signal; and  
means for updating the decision rule set in accordance with a probability.
- [c14] 14. The system of claim 13, wherein means for using comprises means for conditioning selection upon whether certain information is known about the user.
- [c15] 15. The system of claim 13, wherein means for using comprises means for conditioning selection upon whether a model has converged.

- [c16] 16. The system of claim 13, wherein means for updating includes updating depending upon a Markov Decision Process.
- [c17] 17. The system of claim 13, wherein means for updating includes updating depending on whether the user selected a product for purchase.
- [c18] 18. A computer readable medium bearing computer software instructions for execution by a processor to cause a computer system to perform:  
using a decision rule set to select either one of a plurality of first signals or one of a plurality of second signals, for sending to a display for a user, the one of the plurality of second signals being to solicit information about the user;  
measuring a response of the user to the previously selected signal; and  
updating the decision rule set in accordance with a probability.